



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/646,012 | 08/22/2003 | William Lee Devlin | 200300047-1 | 8976 |

7590 05/10/2006

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

MARTINEZ, DAVID E

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2181

DATE MAILED: 05/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------|---------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/646,012 | DEVLIN ET AL. | |
| | Examiner | Art Unit | |
| | David E. Martinez | 2181 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

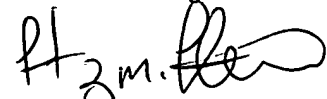
Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


 Supervisory
 FRITZ FLEMING
 PRIMARY EXAMINER 5/8/2006
 GROUP 2100
 AU 2181

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The previous objection directed to the title of the invention is being vacated by the Examiner. The typo in the title having the term "Comperssion" was being used by the PTO electronic systems that keep track of the application. The title submitted by the Applicant in the specification is actually correct and needs no editing.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 7, 8, 15 and 20, are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility.

1. With regards to claims 7 and 8, the term "wherein said sending and said outputting are carried out concurrently" cannot be performed by the invention since the video capture device cannot output the compressed file at the same instant in time that it receives it because it must compress the file before outputting it back to the processor. It is inherent for there to be a lag and thus the outputting cannot be concurrent to the receiving.
2. With regards to claims 15, 20, and new independent claim 23, they suffer from the same deficiencies as claims 7 and 8 above and thus are rejected under the same rationale.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2181

Claims 1-6, 10, 11, 13, 16, 17 and 19, are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,535,011 to Yamagami et al. (hereinafter Yamagami).

3. With regards to claim 1, Yamagami teaches a file compression method comprising:

sending uncompressed data from a processor [fig 1 element 112] to a video capture device [figs 1 and 2, element 111 integrated with element 100, see column 4 lines 35-38, column 7 lines 30-46, column 13 lines 13-35];

compressing said uncompressed data into compressed data by said video capture device [column 13 lines 13-35]; and

outputting the compressed data by said video capture device to said processor [column 13 lines 13-35].

4. With regards to claim 2, Yamagami teaches the method of claim 1 wherein said data is multimedia [column 13 lines 13-35, column 15 lines 35-55].

5. With regards to claim 3, Yamagami teaches the method of claim 1 wherein said data is video [column 13 lines 13-35, column 15 lines 35-55, column 17 lines 11-14].

6. With regards to claim 4, Yamagami teaches the method of claim 1 wherein said data is in a digital video format [column 13 lines 13-35, column 15 lines 35-55, column 17 lines 11-14].

7. With regards to claim 5, Yamagami teaches the method of claim 1 wherein said video capture device comprises a compression chip [fig 2 element 204 column 4 lines 21-25, figs 6 and 7 element 608 column 19 lines 29-34].

8. With regards to claim 6, Yamagami teaches the method of claim 5 wherein said compressed data is in a digital video format [column 13 lines 13-35, column 15 lines 35-55, column 17 lines 11-14].

Art Unit: 2181

9. With regards to claim 10, the method of claim 1 wherein said compressed data is in a Digital Versatile Disk compatible format [column 13 lines 13-35, column 15 lines 35-55, column 17 lines 11-14].

10. With regards to claim 11, Yamagami teaches the method of claim 1 further comprising:
publishing said compressed data using said processor device [column 17 lines 67].

11. With regards to claim 13, Yamagami teaches a file compression device comprising:
a compression encoder, [fig 6 element 608 or element 202] comprising:

means for receiving a digital data stream [fig 6 elements 201 and 207]; and

means for converting said digital data stream into a compressed data stream [fig 6 element 608 or element 202]; and

a controller [fig 6 element 207 or element 201] comprising:

means for receiving an input stream of a digital file from a processor device [fig 6 “output to personal computer” bus connected to element 207 or “output to camera” bus connected connected to element 201];

means for inputting said input stream into said compression encoder for compression [fig 6 element 207 and 201], and

means for receiving compressed files from said compression encoder for output, as an output stream to said processor [fig 6 element 207 element 201 connected over buses to elements 608 and 202].

12. With regards to claim 19, Yamagami teaches a system comprising:

a video capture device [fig 5 and fig 6] comprising:

an analog-to-digital converter [fig 5 element 10];

a multimedia compression encoder [fig 6 element 608 or element 202]

comprising:

Art Unit: 2181

means for receiving a digital data stream [fig 6 elements 201 and 207];

and

means for converting said digital data stream into a compressed multimedia data stream [fig 6 element 608 or element 202]; and

an internal bus for carrying said digital data stream from said analog-to-digital converter to said encoder [fig 6 "output to camera" bus connected to element 201], and

a controller comprising [fig 6 element 207]:

means for receiving an input stream of a digital multimedia file from a processor [fig 6 "output to personal computer" bus connected to element 207];

means for inputting said input stream into said internal bus for compression by said encoder [fig 6 element 207 and 201];

means for receiving compressed multimedia files from said multimedia compression encoder [fig 6 element 207 connected over buses to elements 608 and 202]; and

means for outputting said compressed multimedia file as an output stream to said processor [fig 6 "output to personal computer" bus connected to element 207].

13. With regards to claim 16, the device of claim 13 wherein said input stream is an uncompressed digital multimedia data stream [column 13 lines 13-35, column 15 lines 35-55, column 17 lines 11-14].

14. With regards to claim 17, it is of the same scope as claim 6 above and thus rejected under the same rationale. Furthermore, digital video format is inherent as being compatible for use on a Digital versatile disk. The intended use of the digital video format being compatible with a DVD is not necessarily limiting.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-9, 12, 14, 15, 18, 20-23, and 25-7, are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,535,011 to Yamagami et al. (hereinafter Yamagami). In view of US Patent Application Publication No. US 20030156649 A1 to Abrams, JR. (hereinafter Abrams).

15. With regards to claims 7 and 8, Yamagami fails to teach the method of claim 1 wherein said receiving and said outputting are carried out concurrently. However, Abrams teaches receiving and outputting of data being carried out concurrently via a serial connection for the benefit of maximizing the bus throughput [paragraphs 63, 120, 121].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of both Yamagami and Abrams to receive and output concurrently via a serial connection for the benefit of maximizing bus throughput.

16. With regards to claim 9, Yamagami fails to teach the method of claim 1 wherein said compressed file is in a Moving Pictures Experts Group format. However, Abram teaches compression of data using the Moving Pictures Experts Group format for the benefit of being able to store the data on a dvd to facilitate playback of the data on a DVD player. [paragraphs 4, 8, 57, 107] and also for the benefit of being able to provide video over low bandwidth networks [paragraphs 4 and 79].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of both Yamagami and Abram have the compressed file be in a

Art Unit: 2181

Moving Pictures Experts Group format for the benefit of being able to store the data on a dvd to facilitate playback of the data on a DVD player, and to be able to provide video over low bandwidth networks

17. With regards to claim 12, Yamagami fails to teach the method of claim 11 wherein said publishing comprises copying said compressed file to a Digital Versatile Disk. However, Abrams teaches receiving encoded/compressed digital video data in a computer and recording/storing said encoded/compressed digital video data in a Digital Versatile Disk (DVD) for the benefit of being able to facilitate playback of the data on a DVD player. [paragraphs 8, 57, 107].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of both Yamagami and Abrams to have the publishing comprise copying said compressed file to a Digital Versatile Disk for the benefit of being able to facilitate playback of the data on a DVD player.

18. With regards to claim 14 and 21, Abrams teaches the device of claim 13 wherein said controller further comprises:

means for deserializing said input stream; and

means for serializing said output stream for the same reasons as those set forth above under claim 8 above [paragraphs 63, 120, 121].

19. With regards to claim 15, it is of the same scope as claim 8 above and thus rejected under the same rationale.

20. With regards to claim 18, the device of claim 17 it is of the same scope as claims 9 and 12 above and thus rejected under the same rationale.

21. With regards to claim 20, it is of the same scope as claim 8 above and thus rejected under the same rationale.

Art Unit: 2181

22. With regards to claim 22, it is of the same scope as claims 9 and 12 above and thus rejected under the same rationale.

23. With regards to claim 23, it is of the same scope as the combination of claims 13 and 7 above and thus is rejected under the same rationale.

24. With regards to claim 25, Yamagami teaches the auxiliary compression system of claim 23, further comprising:

an analog-to-digital converter for converting analog data to second digital data which is input to the compressor for compression [see claim 19 above which includes this limitation].

25. With regards to claim 26, Yamagami teaches the auxiliary compression system of claim 23, wherein said compressor, said controller, and said analog-to-digital converter are packaged in a video capture device [the elements are contained in element 111 which can be/is incorporated inside element 100].

26. With regards to claim 27, Yamagami teaches the auxiliary compression system of claim 23, wherein said computer contains an editing program to edit said uncompressed data [fig 1 host computer element 112 being a computer, has an operating system that can enable one to edit any data that it contains. e.g. renaming the title of a file (data) before sending it to a remote location].

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,535,011 to Yamagami et al. (hereinafter Yamagami). In view of US Patent Application Publication No. US 20030156649 A1 to Abrams, JR. (hereinafter Abrams). Further in view of US Patent No. 4,611,342 to Miller et al.

27. With regards to claim 24, the combination of Yamagami and Abrams teaches are silent as to the the auxiliary compression system of claim 23, comprising:

Art Unit: 2181

a serial-to-parallel converter configured to convert said uncompressed data from a serial to a parallel form which is input into said compressor. However, Miller teaches the use of a serial-to-parallel converted configured to convert uncompressed data from a serial to a parallel form which is input into a compressor for the benefit of inputting data into the compressor at a higher throughput [column 9 lines 64-66].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Yamagami, Abrams and Miller to provide a serial-to-parallel converter configured to convert said uncompressed data from a serial to a parallel form which is input into said compressor for the benefit of inputting data into the compressor at a higher throughput.

Response to Arguments

Applicant's arguments filed 3/7/06 have been fully considered but they are not persuasive.

With regards to claim 5, in the interest of compact prosecution, the claim has been examined even though it failed to follow the rules set forth in the MPEP directed to amendments (the amended limitation "video capture device comprises a compression chip" wasn't underlined and thus non-compliant with the rules). See 37 CFR 1.121 section (c).

With regards to Applicant's arguments in page 6 Section III directed to the 101 rejection of claims 7,8,15 and 20, as was pointed out by the Applicant, the sending and outputting of data can be carried out concurrently or in parallel most of the time, but not all of the time. The sending and outputting cannot be concurrent all of the time (which is how it's currently being claimed) since at that first instant in time when data is sent by the processor to a video capture device, because of the lag that takes place inside the video capture device due to the compression operation, there is no data being outputted back because it is being currently

Art Unit: 2181

processed, and thus, no concurrency takes place – only the receiving of data and its processing takes place at that moment. After enough compression has taken place to start outputting it back to the processor as compressed data, then data is transferred concurrently or in parallel, but concurrency does not take place all of the time as is currently being claimed. Additionally, please note that the same reasons discussed above, new independent claim 23 suffers from the same 101 deficiency and is rejected under the same rationale.

With regards to Applicant's arguments in page 8 Section V directed to the 102 rejection of claims 1, 13, and 19, the Examiner respectfully disagrees. Column 13 lines 13-35 clearly disclose the sending of uncompressed data from a processor [host computer 112] to a video capture device [camera element 100], compressing the data and returning the data from the video capture device to the processor. Specifically, applicant cites a section that discloses the transfer to and from both the processor and the video capture device but points out that a conversion is being done, and that no compression takes place. In lines 25-35 it is discussed how data is converted as in how it is compressed – "DPS 202 receives the unprocessed image data ... After that, the uncompressed data formed at the buffer memory 205 is returned to the host computer 112 through the bus controller 206 and the external interface controller 207 either as it is or after compressing it. (*emphasis added*). Column 18 lines 48-54 also discloses how uncompressed data is transferred from the host to the video capture device for compression, and then returning the compressed data to the host. Furthermore, what was admitted in the 103 rejection was not that the Yamagami reference failed to disclose returning compressed data, but that it failed to disclose the transfer of data from the processor to the video capture device and back, was concurrent as shown above. As per the receiving and outputting over a serial bus, the Examiner relied on the Abrams reference and not the Yamagami as shown above under the claim rejections.

Art Unit: 2181

With regards to Applicant's arguments in page 9 Section VI directed to the 103 rejection of claims 7-9, 12, 14, 15, 18, and 20-22, the Examiner respectfully disagrees. The Examiner relied on the Yamagami reference to teach the transfer of data from a processor to a video capture device, and not the Abrams reference. Also, the cited paragraphs 63, 120 and 121 do teach the general teaching of transferring data concurrently over a serial bus for the benefit of maximizing the bus throughput. In particular, paragraph 63 discloses the use of a serial bus to transfer of data, paragraph 120 discloses the receiving uncompressed (digital data stream being encoded to a format suitable for a stream), compressing that uncompressed data to compressed data and then outputting that compressed data, and then paragraph 121 discloses the use of concurrency (the stream is transmitted and stored). As per the Applicant's claim regarding the lack of motivation or suggestion to combine the references to achieve the claimed result, the Examiner interprets the argument to constitute a general allegation of patentability as applicant hasn't specifically pointed out any particular error in the provided motivational statement of the last office action.

With regards to Applicants arguments in page 10 directed to the dependent claims and the new claims, due to the reasons set forth above, they stand rejected.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

Art Unit: 2181

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Martinez whose telephone number is (571) 272-4152. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fritz M. Fleming can be reached on 571-272-4145. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DEM

Fritz M. Fleming
Supervisory
FRITZ FLEMING
PRIMARY EXAMINER
GROUP 2100
5/8/2006
AU2181